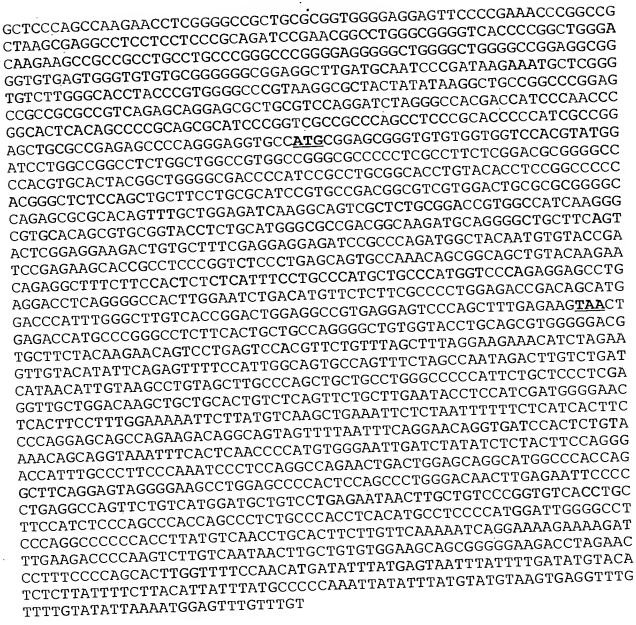
# FIGURE 1




09624647 "080701

# FIGURE 2

MRSGCVVVHVWILAGLWLAVAGRPLAFSDAGPHVHYGWGDPIRLRHLYTSGPHGLSSCFLRI
RADGVVDCARGQSAHSLLEIKAVALRTVAIKGVHSVRYLCMGADGKMQGLLQYSEEDCAFEE
EIRPDGYNVYRSEKHRLPVSLSSAKQRQLYKNRGFLPLSHFLPMLPMVPEEPEDLRGHLESD
MFSSPLETDSMDPFGLVTGLEAVRSPSFEK

**signal peptide:**
amino acids 1-22

**N-myristoylation sites:**
amino acids 15-21, 54-60, 66-72, 201-207

**Prokaryotic membrane lipoprotein lipid attachment site:**
amino acids 48-59

**HBGF/FGF domain:**
amino acids 80-131

T07080"4h9h2660

T07080" 24h9h2660

FIGURE 3A

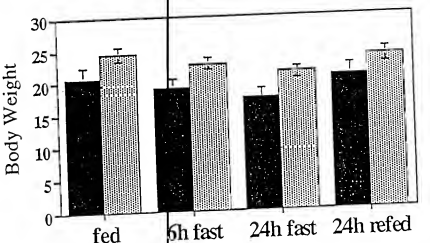
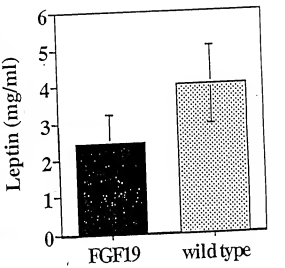



FIGURE 3B



TO7080" 7h9h2660

FIGURE 4A

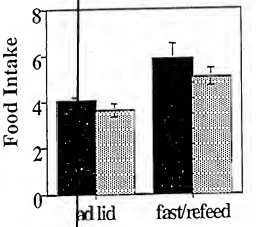
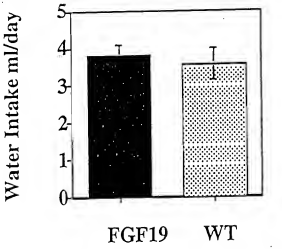



FIGURE 4B



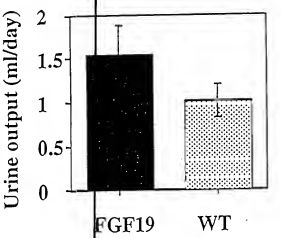




FIGURE 4C

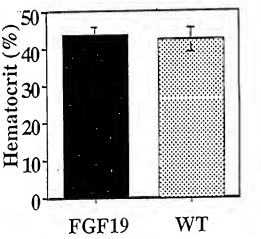
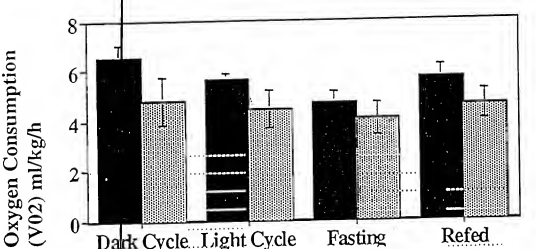



FIGURE 4D

T07080" 24h9h2660

# FIGURE 5



10/080701 "09/924,647

FIGURE 6A




FIGURE 6B

T07080" 4h9h2660

FIGURE 7A

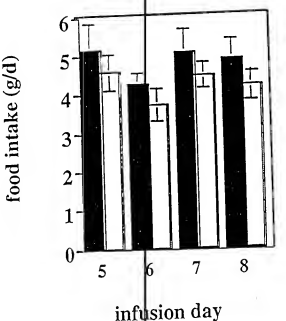



FIGURE 7B

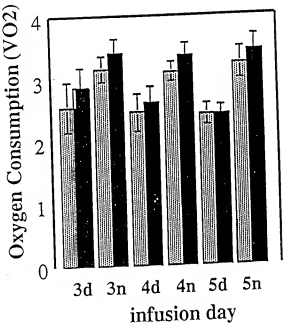


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FIGURE 8A

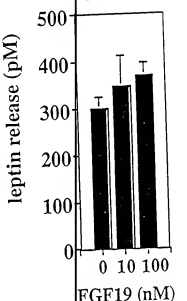
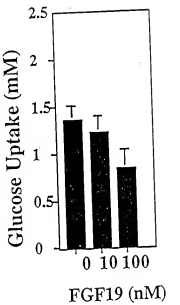



FIGURE 8B



TO4080"4h9h2660

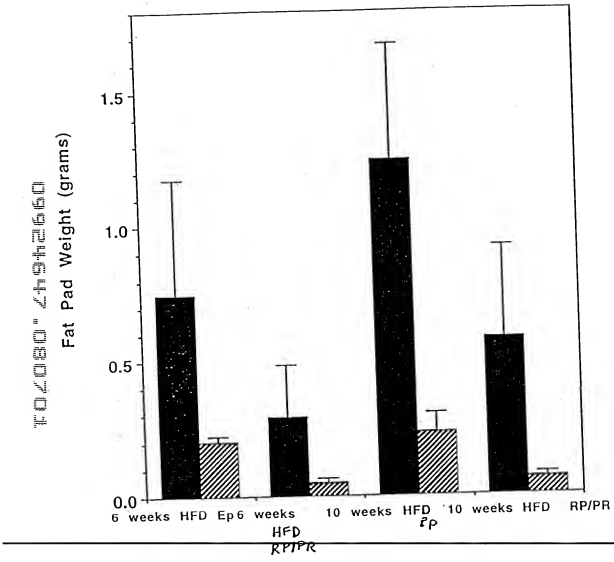



FIGURE 9

09924547.080701

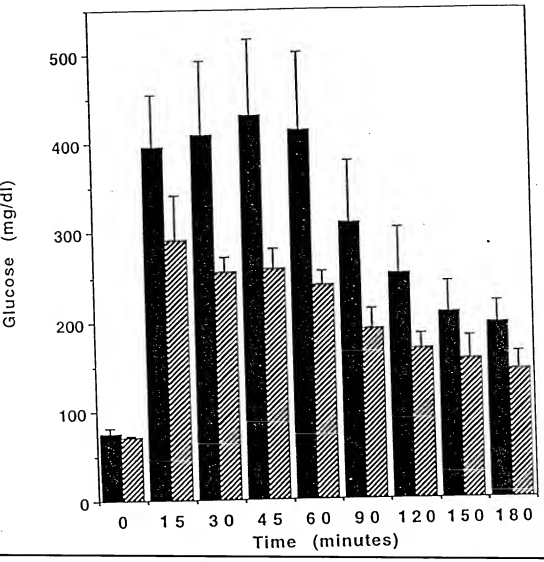



FIGURE 10

Fig. 11

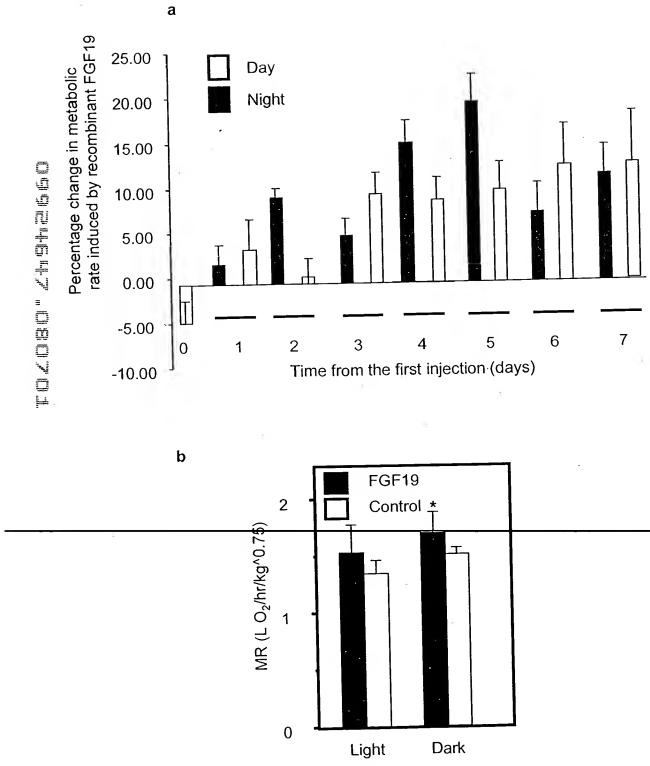

a
Percentage change in metabolic rate induced by recombinant FGF19
25.00
20.00
15.00
10.00
5.00
0.00
-5.00
-10.00
Day
Night
0
1
2
3
4
5
6
7
Time from the first injection (days)
b
MR (L O2/hr/kg^0.75)
2
1
0
FGF19
Control
*
Light
Dark

Fig 12

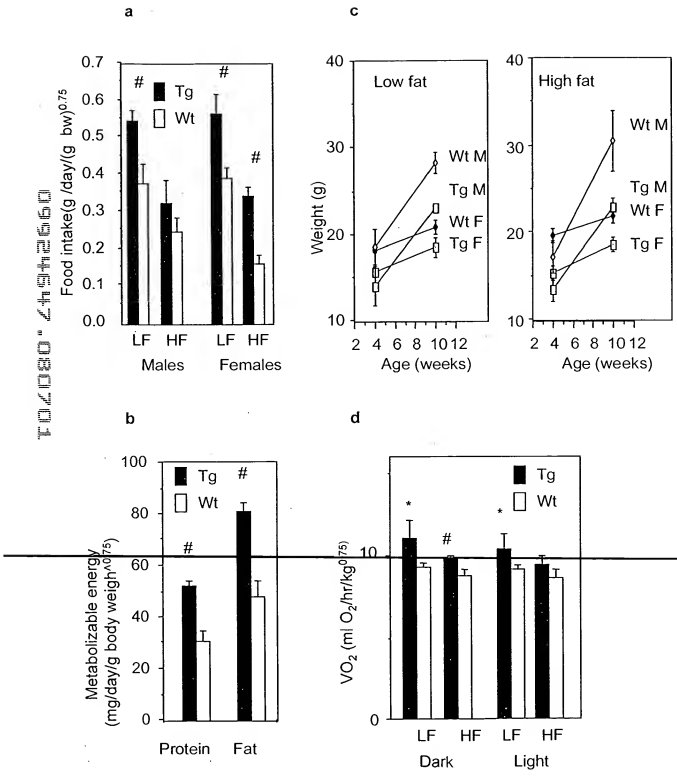
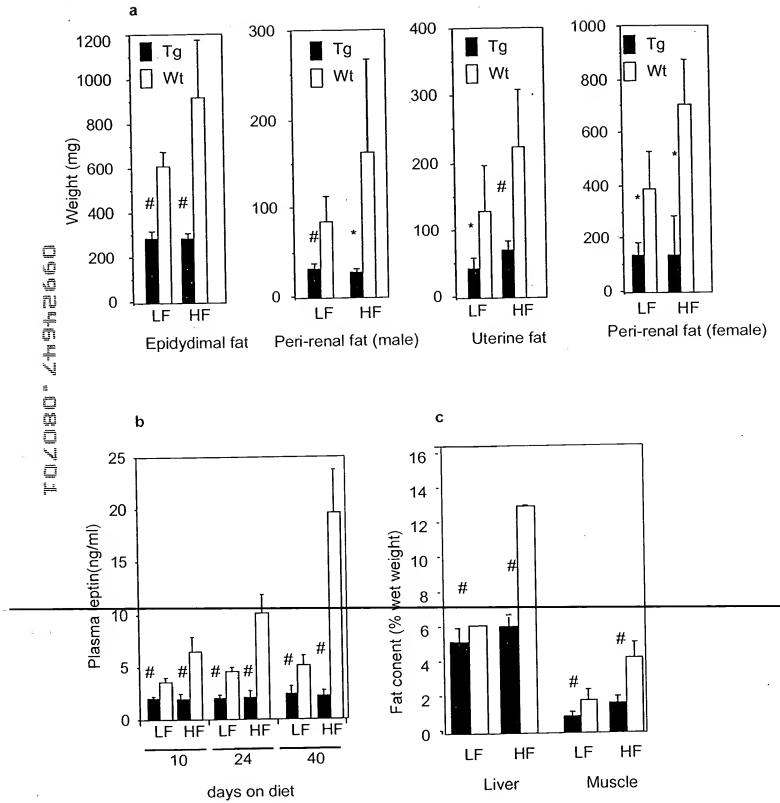
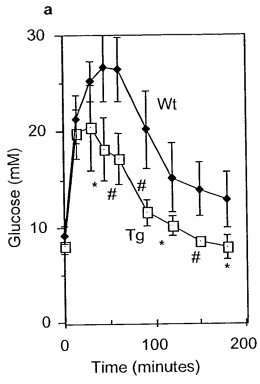

a
c
b
d
Food intake(g /day/(g bw)^0.75
Tg
Wt
LF HF LF HF
Males Females
Low fat
High fat
Wt M
Tg M
Wt F
Tg F
Weight (g)
Age (weeks)
Metabolizable energy (mg/day/g body weigh^0.75)
Protein Fat
VO2 (ml O2/hr/kg^0.75)
Dark Light

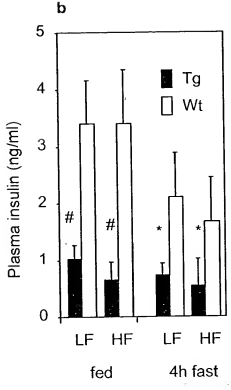
Fig. 13

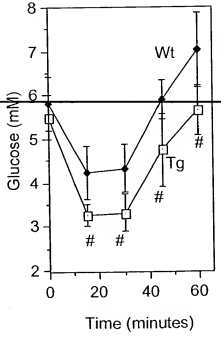


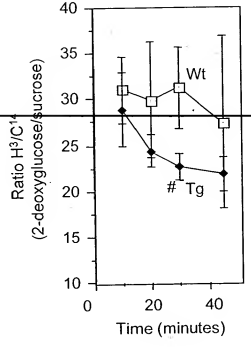

TO4080 "4h9h2660

Fig. 14.



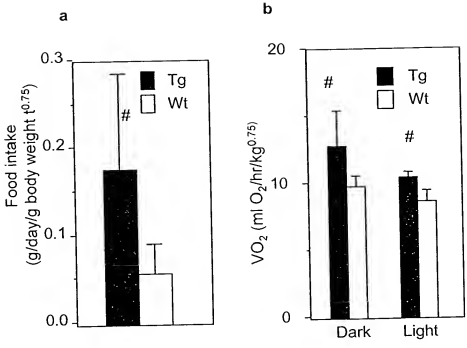



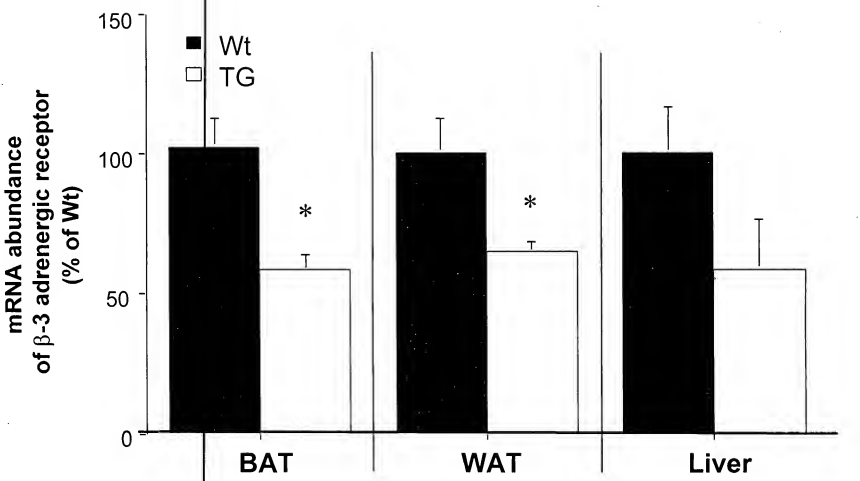

TF4080 - 4494260

Fig. 15.


a
b
Food intake
(g/day/g body weight t^0.75)
0.3
0.2
0.1
0.0
Tg
Wt
#
VO2 (ml O2/hr/kg^0.75)
20
10
0
Dark
Light

TOZ080'Z+9+2660

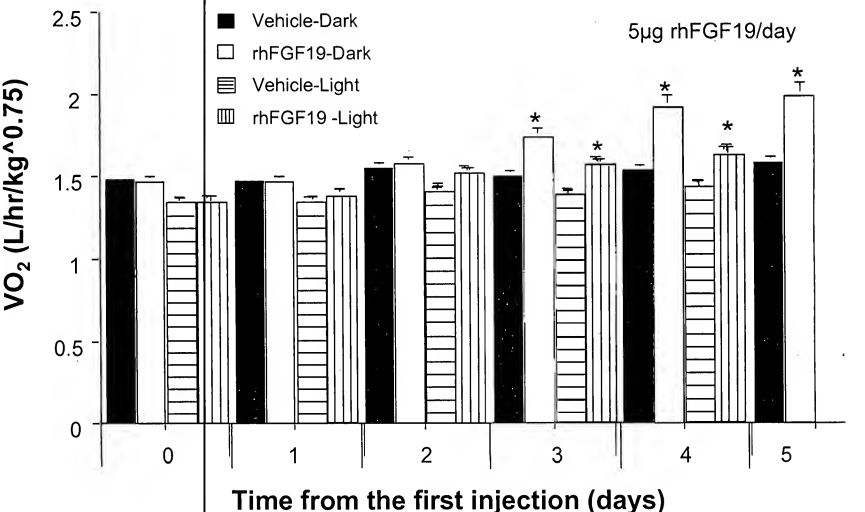
# Figure 16




*P < 0.05 vs Wt controls

TO2080" 2h9h2660

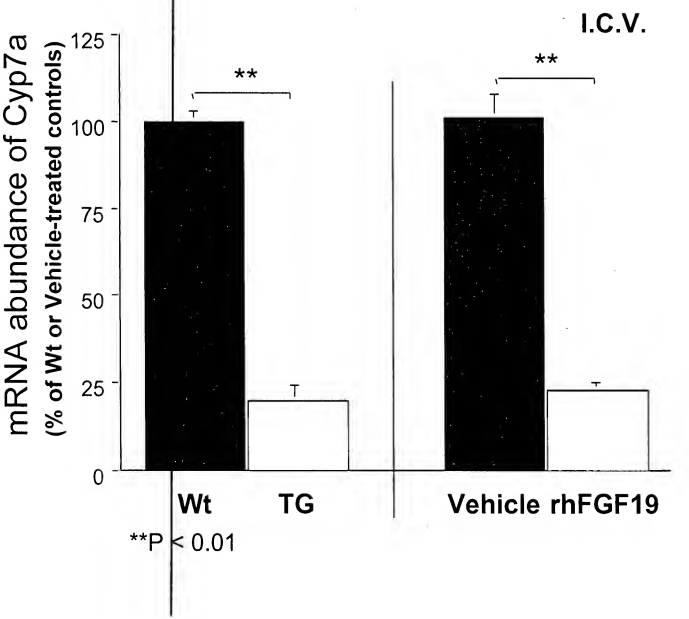
# Figure 17




*P < 0.05 vs Vehicle controls with the same cycle on the same day

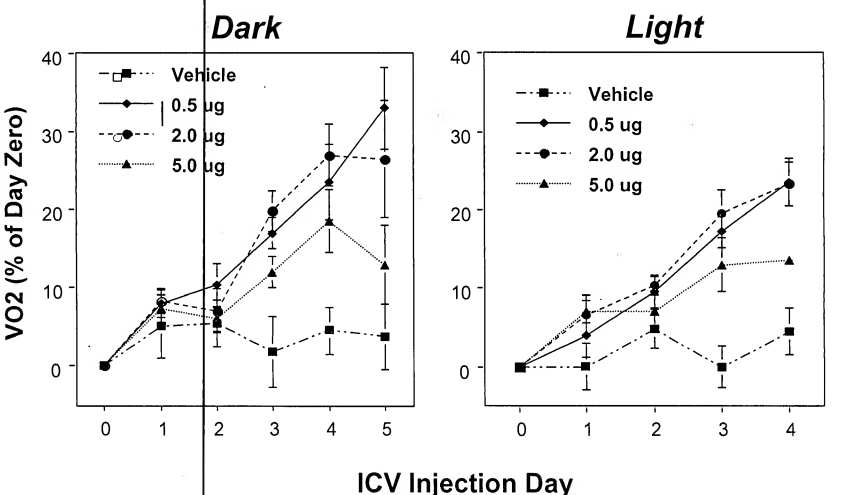
TO7080' 4h9h2660

## Figure 18



TO2080*24942660

# Figure 19



# Figure 20

| | Vehicle | rhFGF19 5.0 µg | rhFGF19 2.0 µg | rhFGF19 0.5 µg |
|---|---|---|---|---|
| NPY | 1.0 +/- 0.08 | 0.81 +/- 0.23 | 0.63 +/-0.20 | 0.40 +/- 0.08 |
| AgRP | 1.0 +/- 0.33 | 0.26 +/- 0.10 | 0.57 +/- 0.26 | 0.29 +/- 0.16 |
| POMC | 1.0 +/- 0.27 | 1.49 +/- 0.42 | 3.48 +/- 1.5 | 38.77 +/- 3.32 |
| MC4-R | 1.0 +/- 0.16 | 0.47 +/- 0.09 | 0.70 +/- 0.10 | 0.48 +/- 0.08 |